

Patent Abstracts of Japan

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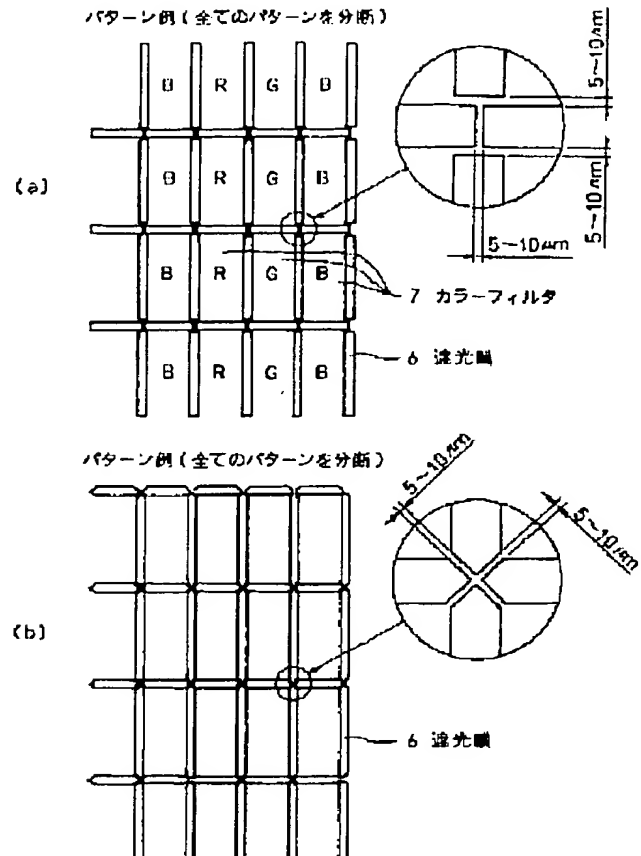
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TITLE : LIQUID CRYSTAL DISPLAY DEVICE



ABSTRACT : PROBLEM TO BE SOLVED: To prevent the occurrence of display defect by forming an electrically conductive light shielding film into divided pattern, thereby reducing the voltage drop of a counter electrode even through the transparent electrode on a top coat and the light shielding film are into continuity.

SOLUTION: A matrix shaped light shielding film 6 is formed by a photo-lithography by depositing chromium on the transparent insulating substrate made of glass. The light shielding film 6 is formed corresponding to gate lines and drain lines of a TFT array substrate when it is combined with the substrate. At this time, the film 6 is formed into such patterns that it is finely divided. Such patterns are easily formed by changing mask patterns at the time of forming the light shielding film 6 by the photo-lithography as the method forming the film and it is desirable that intervals among divisions of the light shielding film 6 are the order of about $5\mu\text{m}$ ~ $10\mu\text{m}$. Consequently, even though the counter electrode and the light shielding film 6 are brought into conduction by the pinhole of the top coat, etc., since voltage is leaked only through the part in contact with the counter electrode, the voltage drop is reduced.

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